Modern Simple Mathematics

PART - II

By

Council for Preparation Of Textbooks

Translated By

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FOREWORD

The books are frequently revised and updated to meet the challenges of the fast changing world in the fields of science and technology , new developments in the methodology of teaching and growing needs of the students to understand the subject through simple, lucid and illustrative method.

The book in your hands i.e. Modern Simple Mathematics is the part of our plan to revise all our textbooks.

The thoughts and views which have a direct influence on the lives of the students and are associated with the real purpose of their lives have been given due importance and consideration in the preparation of this book.

Keeping in mind the general and prevailing perception among the students, the parents and of course the teachers that Mathematics is a dull and boring subject, we have designed this book so as to allay such Maths phobia among these people. Moreover, efforts have been made to clear each and every point by profusely illustrating the book with sufficient solved examples, graphics and instructions for teachers wherever necessary The exercises have been designed to relate them with the day-to-day needs of the students.

We acknowledge all those whose kind cooperation, guidance and assistance have culminated in the production of this book.

Suggestions and comments are highly appreciated and will be thankfully acknowledged.

New Delhi
19-09-2013

Mohd. Ashfaque Ahmed
(Incharge)

TEACHING MATHEMATICS

The need and utility of Mathematics in our day-to-day life is universally acknowledged. No one can eventually do without the basic concept of Mathematics - whatsoever profession one is in.Everyone has to deal, more or less, with personal and family budget,marketing, mutual give-and-take, measurement, Zakat and Ushr inheritance and other obligations. That is why the practice of teaching basic Mathematics to little children from the very beginning has been in vogue for centuries. And in this age of science and technology this need has assumed much more importance. Inventions, industries and scientific developments in the various fields have left an abiding influence on the very course of our life. Whether it is industry or handloom, business or agriculture, science or technology, the knowledge of Mathematics is required at every step. Thus for the success of life it is essential that every pupil is taught Mathematics up to the secondary level.

Not only to meet practical needs of life, the knowledge of basic concepts of Mathematics is necessary to gain mastery over dif ferent subjects, to study science and social sciences and even the books of language, and to understand them quite well.

Children do require the knowledge of counting, addition, subtraction and other details of weighing and measurement in doing work at home and school, in knowing the quantity and number , shape and size of things, in business transactions, in games and sports and in satisfying their curiosity at every step in their day-to-day life. For the fulfilment of this need it is necessary to teach them Mathematics. This is the most important subject next only to the basic knowledge of Islam and the mother tongue. Thus it should be given special attention accordingly

The real purpose of teaching Mathematics at the elementary level is to gradually develop so much awareness in children that they may solve mathematical problems in their day-to-day life, ascertain the quantity and number as well as shape and size of the things they come across, handle business transactions, have suficient knowledge of weighing and measurement as well as time and distance, and make further study in Mathematics. To achieve this purpose it is inevitable to teach Mathematics at the elementary level.

(Late) Afzal Hussain, M.A.; L.T

CONTENTS

Chapter	TOPIC	Page No.
1.	Revision	7
2.	Introduction of 3 and 4-digit numbers Ones, Tens and Hundreds (O, T, H)	11
3.	Addition and Subtraction of 2 and 3-digit numbers (without borrowing)	19
4.	Concept of Multiplication	26
5.	Place Value	37
6.	Comparison of numbers	41
7.	Addition and subtraction of 2 and 3-digit numbers with carry / borrow	42
8.	Place Value in 4-digit numbers	54
9.	Addition, Subtraction of 4-digit numbers (without carry)	56
10.	Multiplication of 3 and 4-digit numbers by single digit number	58
11.	Name of Months	61
12.	Fractional numbers	64
13.	Unit of length / Measurement	65
14.	Indian Currency	67
15.	Shapes	69
16.	Telling Time	70
17.	Reading and Writing 1-20 in Ordinal numbers	71

CHAPTER - 1

Revision

1. Tell About yourself

- What is your name? .....
- How old are you? .....
- How many brothers do you have? .....
- How many sisters do you have? .....
- In which class do you read? .....
- How many students are there in your class? .....
- How many toes/fingers do you have in each of your feet? .....
- At what time do you go to school? .....
- When do you come back from school? .....
- How many brothers/sisters are you in all? .....

2. Write numbers written in words, in numerals.

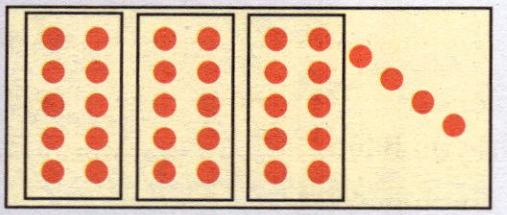
- Allah has ninety-nine ☐ names.
- The Holy Qur'an has thirty ☐ paras.
- Hazrat Muhammad (s.a.w.) was made prophet (Nabee) at the age of the forty. ☐
- Muslims say Salat (Namaz) five ☐ times daily.
- Hazrat Muhammad (s.a.w.) lived for sixty-three ☐ years.
- A week has seven ☐ days.

3. Write in numbers.

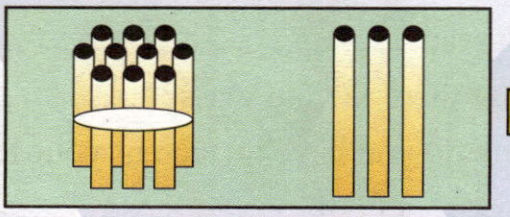
Nineteen ☐	Twenty-nine ☐	Thirty-nine ☐
Fifty-nine ☐	Forty-nine ☐	Sixty-nine ☐
Seventy-nine ☐	Eighty-one ☐	Ninety-nine ☐
Eighty ☐	Fourteen ☐	Seventeen ☐
Sixty-seven ☐	Fifty ☐	Twelve ☐

Count Tens and Ones and fill in the blank as shown in the example

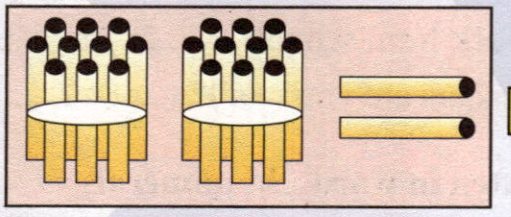
EXAMPLE



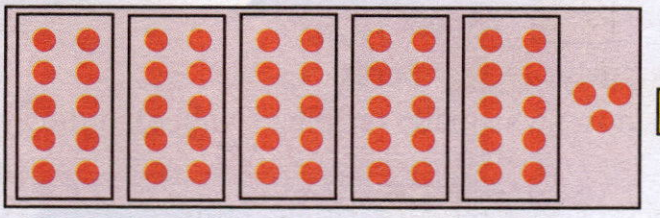
3 Tens and 4 Ones = 34



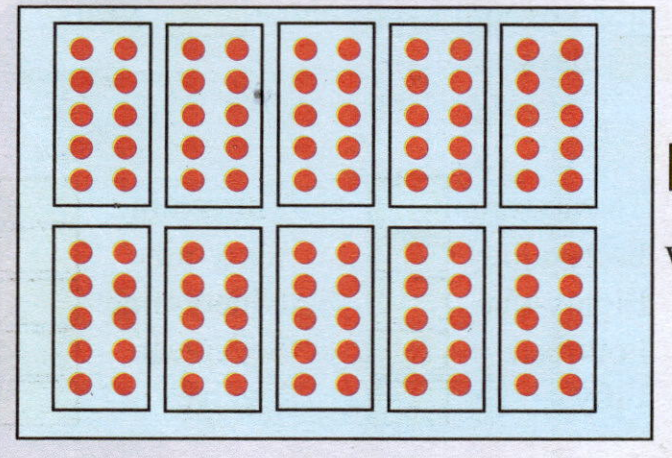
☐ Tens and ☐ Ones =



☐ Tens and ☐ Ones =



☐ Tens and ☐ Ones =



☐ Tens and ☐ Ones =

What number did you get =

- **Fill in the blanks:**

EXAMPLE $20 + 9 =$

Tens	Ones	29
2	9	Twenty-nine

$50 + \square =$

Tens	Ones	56
	6	Fifty-six

$\square + 7 =$

Tens	Ones	
8		

$50 + \square =$

T	O	
		Fifty-two

- **Write in numbers:**

		T	O
Five tens, Four ones	=		
Eight tens, Nine ones	=		
Six tens, Seven ones	=		
Four tens, One one	=		

- **Complete the series with suitable numbers**

EXAMPLE 54, 55, 56

(i) 67, 68, ☐

(ii) ☐, 42, 43

(iii) 60, ☐, 62

(iv) 92, ☐, 94

(v) ☐, 80, 81

(vi) 98, ☐, 100

- **Fill in the blanks with $>$ or $<$**

EXAMPLE

$3 < 5$ $\quad$ $5 > 3$

25 ☐ 17 $\quad$ 50 ☐ 52

53 ☐ 32 $\quad$ 80 ☐ 90

- **Add:** ① $18 + 5 =$ ☐ ② $32 + 27 =$ ☐ ③ $35 + 12 =$ ☐

④ $24 + 23 =$ ☐ $\quad$ ⑤ $25 + 14 =$ ☐ $\quad$ ⑥ $27 + 31 =$ ☐ $\quad$ ⑦ $56 + 22 =$ ☐ $\quad$ ⑧ $45 + 51 =$ ☐

- **Subtract:** ① $45 - 14 =$ ☐ $\quad$ ② $35 - 24 =$ ☐

③ $74 - 23 =$ ☐ $\quad$ ④ $99 - 11 =$ ☐

⑤ $96 - 54 =$ ☐ $\quad$ ⑥ $87 - 15 =$ ☐ $\quad$ ⑦ $14 - 12 =$ ☐ $\quad$ ⑧ $46 - 36 =$ ☐

⑨ $38 - 22 =$ ☐ $\quad$ ⑩ $46 - 23 =$ ☐ $\quad$ ⑪ $58 - 8 =$ ☐ $\quad$ ⑫ $35 - 3 =$ ☐

CHAPTER - 2

Introduction of 3-digit and 4-digit numbers

Ones, Tens and Hundreds (O, T, H)

These are 9 marbles ●●●●●●●●● 9

one more added, now there are 10 marbles ●●●●●●●●●● 10

10 is a two-digit number. (1 and 0)
The digit on the right side is ones or unit and the one on the left side is Ten. i.e. 10 has One ten and zero one)

Tens	Ones
9	9

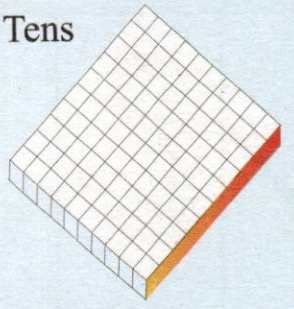
99 is also a two-digit number and is written as
99 is the greatest two-digit number.
When One is added to 99 we get One hundred. (99 + 1 = 100)

100 is a three-digit number and written as follows:

Hundreds	Tens	Ones
1	0	0

or 100

One hundred has 100 Ones or 10 Tens



1 Hundred

10
10
10
10
10
10
10
10
10
10
100

One hundred has 1 'Hundreds', zero 'Tens' and zero Ones.

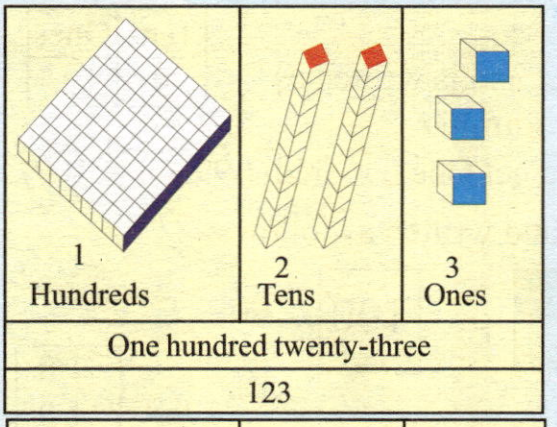
100 Ones = 100
10 Tens = 100
1 Hundreds = 100

Note: Concept of Hundreds can further be illustrated by showing a hundred rupee note or a bunch of hundred sticks tied together.

Similarly:

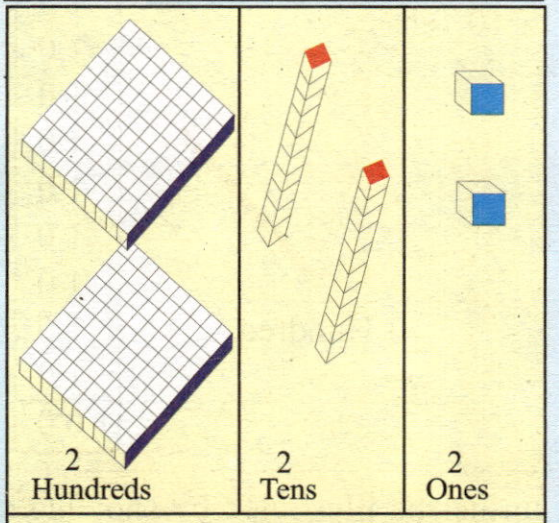
2 Hundred	=	2 Hundreds
3 Hundred	=	3 Hundreds
4 Hundred	=	4 Hundreds
5 Hundred	=	5 Hundreds
6 Hundred	=	6 Hundreds
7 Hundred	=	7 Hundreds
8 Hundred	=	8 Hundreds
9 Hundred	=	9 Hundreds
10 Hundred	=	10 Hundreds

H	T	O
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0



One hundred twenty-three

123



Two hundred twenty-two

222

EXERCISE

Fill in the blanks:

1.

H	T	O
7	☐	☐

Seven hundred forty nine

2.

H	T	O
☐	☐	☐

Nine hundred fifteen

3.

H	T	O
3	2	5

Three hundred.....

4.

H	T	O
2	6	1

Reading and writing 3-digit numbers 101 to 200

You have learnt reading and writing of the numbers upto 100 in previous class. Now you will learn reading and writing of the numbers above 100.

101	111	121	131	141	151	161	171	181	191
102	112	122	132	142	152	162	172	182	192
103	113	123	133	143	153	163	173	183	193
104	114	124	134	144	154	164	174	184	194
105	115	125	135	145	155	165	175	185	195
106	116	126	136	146	156	166	176	186	196
107	117	127	137	147	157	167	177	187	197
108	118	128	138	148	158	168	178	188	198
109	119	129	139	149	159	169	179	189	199
110	120	130	140	150	160	170	180	190	200

201	301	401	501	601	701	801	901
202	302	402	502	602	702	802	902
203	303	403	503	603	703	803	903
204	304	404	504	604	704	804	904
205	305	405	505	605	705	805	905
206	306	406	506	606	706	806	906
207	307	407	507	607	707	807	907
208	308	408	508	608	708	808	908
209	309	409	509	609	709	809	909
210	310	410	510	610	710	810	910

Similarly write up to

300	400	500	600	700		900	1000

EXERCISE

A. Fill in the blanks:

101		103			106				110
	181					186		188	

B. Write in numbers:

Seven hundred nine	7	0	9
Five hundred forty			
Eight hundred six			
Three hundred			
Six hundred fifty three			
Three hundred forty nine			
Two hundrd three			
Forty			

C. Write in words:

115 One hundred fifteen

301 _____

536 _____

922 _____

278 _____

430 _____

840 _____

705 _____

D. Tell what number is formed:

7 Hundreds 0 Tens 0 ones = 700

4 Hundreds 5 Tens 3 ones =

6 Hundreds 0 Tens 1 ones =

4 Hundreds 0 Tens 3 ones =

9 Hundreds 9 Tens 9 ones =

E. Write the next number:

Example: 310, 311

1. 998, ____ **2.** 511, ____ **3.** 680, ____

4. 154, ____ **5.** 105, ____ **6.** 199, ____

F. Write the number that comes before:

1. 315, 316 **2.** ____ 291 **3.** ____ 617

4. ____ 113 **5.** ____ 737 **6.** ____ 888

Introduction of 4-digit numbers

Ones, Tens, Hundreds and Thousands, O, T, H, Th.

When one is added to 999 we get 1000

i.e. H T O 10 hundreds.

10	0	0

But since at any place (Ones, Tnes, Hundreds) we can write only one digit (i.e. from 1 to 9 and 0) we shift 1 to further left and make four places thus:

Th	H	T	O
1	0	0	0

This fourth place is that of Thousands and we get a four-digit number, called one thousand. written as: 1000,

1000 has 1 (one) Thousands, 0 (zero) Hundreds, 0 (zero) Tens, and 0 (zero) Ones.

This is the smallest four-digit number.

1 0 0
1 0 0
1 0 0
1 0 0 (100 ten times)
1 0 0
1 0 0
1 0 0
1 0 0
1 0 0
1 0 0
1 0 0 0

Now if 1, 2 or 3 is added to 1000 we get 1001, 1002 or 1003 respectively and so on till 9999 (Nine thousand nine hundred ninety-nine)

This is the greatest 4-digit number

Remember

Ones	are	from	1	to	9
Tens	are	from	10	to	99
Hundreds	are	from	100	to	999
Thousands	are	from	1000	to	9999

Reading and writing of four-digit numbers

		1021	1031	1041	1051	1061	1071	1081	1091
1002	1012	1022	1032	1042	1052	1062	1072	1082	1092
1003	1013	1023	1033	1043	1053	1063	1073	1083	1093
1004	1014	1024	1034	1044	1054	1064	1074	1084	1094
1005	1015	1025	1035	1045	1055	1065	1075	1085	1095
1006	1016	1026	1036	1046	1056	1066	1076	1086	1096
1007	1017	1027	1037	1047	1057	1067	1077	1087	1097
1008	1018	1028	1038	1048	1058	1068	1078	1088	1098
1009	1019	1029	1039	1049	1059	1069	1079	1089	1099
1010	1020	1030	1040	1050	1060	1070	1080	1090	1100

1101	1111	1121	1131	1141	1151	1161	1171	1181	1191
1102	1112	1122	1132	1142	1152	1162	1172	1182	1192
1103	1113	1123	1133	1143	1153	1163	1173	1183	1193
1104	1114	1124	1134	1144	1154	1164	1174	1184	1194
1105	1115	1125	1135	1145	1155	1165	1175	1185	1195
1106	1116	1126	1136	1146	1156	1166	1176	1186	1196
1107	1117	1127	1137	1147	1157	1167	1177	1187	1197
1108	1118	1128	1138	1148	1158	1168	1178	1188	1198
1109	1119	1129	1139	1149	1159	1169	1179	1189	1199
1110	1120	1130	1140	1150	1160	1170	1180	1190	1200

★ Similarly write up to 9999

★ **9999 is the largest four-digit number.**

EXERCISE

Fill in the blanks:

1021		1023		1025			1028		1030
	1172				1176		1178	1179	

Write in numerals:

Four thousand nine	4 0 0 9
One thousand five	
Four thousand eight hundred twenty	
One thousand one hundred eight	
Nine thousand nine hundred ninety-nine	
One thousand one hundred twelve	
One thousand one hundred sixty	
Seven thousand twenty-five	

Write in words:

2	4	1	9	Two thousand four hundred ninteen
5	6	4	2	
6	8	0	7	
8	0	0	0	
3	4	0	0	
6	0	0	6	
5	3	8	2	
6	2	0	5	

What number is formed?:

3 Thousands 2 Tens Seven Ones =

8 Thousands 9 Tens =

9 Thousands 9 Hundreds 9 Tens =

9 Thousands 9 Hundreds 9 Tens 9 Ones =

4 Thousands 5 Hundreds 6 Tens 7 Ones =

8 Thousands =

Write the next number (What comes next?) :

1060	1061	1007		4225	
9812		1010		1009	
1989		1979		1059	
1999		2999		1799	

What comes before :

1001	1002		4341		3212
	1155		9812		1800
	1900		2000		1000

Number comes after 6799 _____

Number comes after 9712 _____

Number comes after 5399 _____

Number comes after 7950 _____

Number comes before 7000 _____

Number comes before 9102 _____

Number comes before 9317 _____

Number comes before 8215 _____

Write skipping 3 numbers:

397,	400,	403,	406,	409,	412
188,	,	,	,	,	
299,	,	,	,	,	
1004,	,	,	,	,	

CHAPTER - 3

Addition and Subtraction of 2 and 3-digit numbers
(without borrowing)

Addition

Revision:

Add:

1. 64 + 23 = ☐

2. 14 + 7 = ☐

3. 28 + 51 = ☐

4. 15 + 4 = ☐

5. 74 + 14 = ☐

6. 25 + 35 = ☐

7. 43 + 56 = ☐

8. 30 + 20 = ☐

9. 12 + 21 = ☐

10. 31 + 7 = ☐

11. 5 + 12 = ☐

Statement Problems:

12. Naseem has 5 flowers.
Shameem has 9 flowers.
Together they have ☐ flowers.

5 flowers
+ 9 flowers
_____
_____ flowers

13. Jameela has 12 red bangles.
and she has 12 blue bangles.
How many bangles does she have?

12 red bangles
+ 12 blue bangles
Total _____ bangles

14. Khalid has 15 rose plants.
He has also 8 Jasmine plants.
He has total ☐ plants.

15 plants
+ 8 plants
_____ plants
_____

15. Shakeel has 35 rupees.
Jameel has 20 rupees.
Both have ☐ rupees.

35 rupees
+ 20 rupees
Total _____ rupees
_____

Addition of Hundreds

EXAMPLE

	Hundreds	Tens	Ones
	5	0	0
+	3	0	0
	8	0	0

5 Hundreds + 3 Hundreds = 8 Hundreds

500 + 300 = 800

EXERCISE

Add: **1.** 300 + 300 = ____ **2.** 300 + 400 = ____ **3.** 200 + 400 = ____ **4.** 300 + 500 = ____

5. 600 + 100 = ____ **6.** 700 + 100 = ____ **7.** 400 + 500 = ____ **8.** 600 + 300 = ____

Do as shown in the example

EXAMPLE

3 Hundreds + 2 Hundreds = [5] Hundreds = 500

9. 4 Hundreds + 2 Hundreds = [ ] Hundreds = [ ]

10. [ ] Hundreds + 2 Hundreds = 3 Hundreds = 300

11. 4 Hundreds + 5 Hundreds = [ ] Hundreds = [ ]

12. 400 + 200 + 300 = [ ]

Addition of two 3-digit numbers

EXAMPLE

	H	T	O
	2	1	5
+	4	2	3
	6	3	8

Step I : add Ones = 5 + 3
write below Ones = 8

Step II : add Tens = 1 + 2
write below Tens = 3

Step III : add Hundreds = 4 + 2
write below Hundreds = 6

You get answer = 6 3 8

ALWAYS ADD STARTING FROM RIGHT SIDE THAT IS FROM ONES PLACE

Fill in the blanks

1.

H	T	O
1	1	3
4	3	2
5	☐	5

2.

H	T	O
6	3	4
3	5	3
9	8	☐

3.

H	T	O
4	1	7
3	5	1
☐	6	8

4.

H	T	O
6	4	2
2	5	3
☐	☐	5

5.

H	T	O
5	3	0
2	5	0
7	8	☐

6.

H	T	O
8	0	6
1	4	1
9	☐	7

Add:

1. 247 + 130 = ____

2. 404 + 222 = ____

3. 327 + 651 = ____

4. 418 + 341 = ____

5. 222 + 555 = ____

6. 555 + 222 = ____

7. 607 + 240 = ____

8. 323 + 514 = ____

9. 322 + 400 = ____

10. Thre are 225 girls in class I of Aiysha Siddiqa School and 213 girls in class II. How many girls are there in all in classes I and II in that school?

11. Mansoor has 350 black hens and 225 white hens. How many hens does he have in all?

12. There are 320 'Dussehri' mangoes in one basket and 215 'Chausa' mangoes in another. How many mangoes are there in both the baskets?

Recapitulation

Revision (of Subtraction)

EXAMPLE (1)

9 leaves — 6 fell off, leaves left 3

$9 - 6 = 6$

$$\begin{array}{r} 9 \\ -\ 6 \\ \hline 3 \end{array}$$

EXAMPLE (2)

Out of 30 Paraas of the Holy Qur'an, Javed finished reading 20. How many more are to be finised?

Para — 30
Read — 20
Left — 10

or $30 - 20 = 10$

Taking off or lessening is called subtracting. (–) is called minus and it is a symbol of subtraction as + (plus) is a symbol of addition.
While doing subtraction in a two-digit number, first subtract Ones from Ones then Tens from Tens, write below appropriate column as illustrated in the example above.

Practice:

Subtract:

$$\begin{array}{r} 8 \\ -\ 2 \\ \hline \end{array} \qquad \begin{array}{r} 19 \\ -\ 6 \\ \hline \end{array} \qquad \begin{array}{r} 18 \\ -\ 5 \\ \hline \end{array} \qquad \begin{array}{r} 33 \\ -\ 2 \\ \hline \end{array}$$

$$\begin{array}{r} 58 \\ -\ 7 \\ \hline \end{array} \qquad \begin{array}{r} 25 \\ -11 \\ \hline \end{array} \qquad \begin{array}{r} 68 \\ -35 \\ \hline \end{array} \qquad \begin{array}{r} 58 \\ -22 \\ \hline \end{array}$$

$$\begin{array}{r} 95 \\ -73 \\ \hline \end{array} \qquad \begin{array}{r} 70 \\ -30 \\ \hline \end{array}$$

Subtracting 3-digit numbers (without borrowing)

Nasir had	3 0 0	rupees
He spent	− 2 0 0	rupees
How much left?	1 0 0	rupees left

There were	5 0 0	Students in Darsgah
Went on picnic	−3 0 0	Students
left	2 0 0	Students in Darsgah

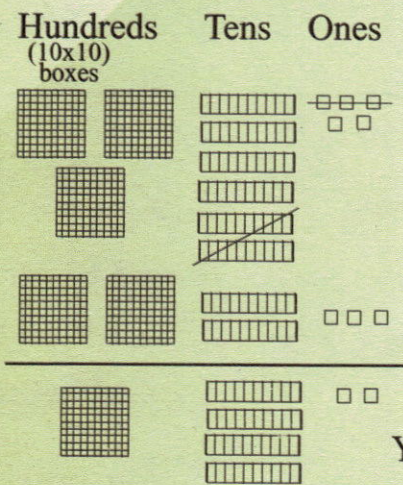
EXERCISE

Do the following sums:

7 0 0	6 0 0	4 0 0	2 0 0
−4 0 0	−3 0 0	−2 0 0	−1 0 0
☐	☐	☐	☐
3 0 0	9 0 0	8 0 0	2 0 0
− ☐	− ☐	− ☐	− ☐
1 0 0	7 0 0	4 0 0	1 0 0

EXAMPLE

There are 365 days in a year. If a school opened for 223 days, for how many days did it remain closed?



Step One: Subtract Ones from Ones

5 − 3 = 2

write under Ones ⟶ 2

Step Two: Subtract Tens from Tens

6 − 2 = 4

write under Tens ⟶ 4

Step Three: Subtract Hundreds from Hundreds 3 − 2 = 1

write under Hundreds ⟶ 1

You get 1 Hundred 4 Tens and 2 Ones

That is 1 4 2

The School remained closed for 142 days.

EXERCISE

Subtract:

1. 657 − 214 = ____

2. 569 − 236 = ____

3. 879 − 829 = ____

4. 976 − 421 = ____

5. 439 − 218 = ____

6. 978 − 756 = ____

7. 867 − 433 = ____

8. 363 − 151 = ____

9. 875 − 342 = ____

10. 734 − 220 = ____

11. 925 − 124 = ____

12. 672 − 352 = ____

13. 857 − 424 = ____

14. 965 − 134 = ____

15. 765 − 432 = ____

Write in vertical columns and subtract:

16. 223 − 102, **17.** 390 − 340, **18.** 663 − 342, **19.** 688 − 332

Statement Problems:

20. Jameel has 867 rupees. He spent 433 rupees. How much is left?

21. In an orchard there are 458 trees of mangoes and guavas. Out of these 325 trees are of mangoes. How many trees are there of guavas?

22. By how much is 120 larger than 85?

23. What should be added to 80 so that the sum is 130?

CHAPTER - 4

Concept of Multiplication

EXAMPLE 1:

How many fingers are there in One hand? = 5

How many fingers are there in the other hand? = 5

How many fingers are there in both hands? = 5 + 5 = 10

5 added 2 times. This may also be written as

five, two times is 10 or 5 x 2 = 10

'x' is sign of multiplication and it is read as multiplied by

[5 x 2 = 10 is read FIVE MULTIPLIED BY TWO IS EQUAL TO TEN]

EXAMPLE 2:

First row 2 Flowers

Second row 2 Flowers

Third row 2 Flowers

Total 6 Flowers

See 2 added 3 times or 2+2+2 = 6

It is written in simplified form as 2 x 3 = 6

Write in simplified form as shown in the example:

EXAMPLE 3:

2 + 2 + 2 + 2 = 2 FOUR TIMES = 8 = 2 x 4 = 8

3 + 3 + 3 = 3 ☐ TIMES = ☐ = ☐ x ☐ = ☐

4 + 4 + 4 + 4 = 4 ☐ TIMES = ☐ = ☐ x ☐ = ☐

5 + 5 + 5 = 5 ☐ TIMES = ☐ = ☐ x ☐ = ☐

1 + 1 + 1 + 1 + 1 = 1 ☐ TIMES = ☐ = ☐ x ☐ = ☐

EXERCISE

A. Fill in the blanks

1. $3 \times 2 = 3 + 3$ or 3 Two Times = 6
2. $4 \times 3 = \square + \square + \square$ or 4 $\square$ Times = $\square$
3. $2 \times 4 = \square + \square + \square + \square$ or 2 $\square$ Times = $\square$
4. $1 \times 6 = \square + \square + \square + \square + \square + \square$ or 1 $\square$ Times = $\square$

5. $\square \times \square = 3 + 3 + 3 + 3 + 3 + 3 = 3$ $\square$ Times = $\square$

6. $\square \times 4 = 5 + 5 + 5 + 5$ = 5 $\square$ Times = $\square$

Adding the same number again and again is also called MULTIPLYING. Give more examples with concrete objects kept in groups having equal numbers of each.

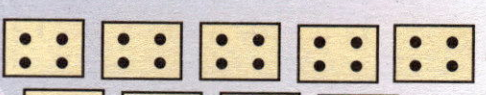
B. Put x sign and write

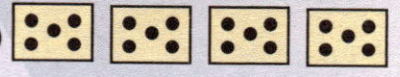
1. 4 Multiplied by 3 = 4 x 3
2. 5 Multiplied by 6 = $\square$
3. 7 Multiplied by 3 = $\square$
4. 3 Multiplied by 7 = $\square$
5. 4 Multiplied by 4 = $\square$
6. 5 Multiplied by 4 = $\square$
7. 4 Multiplied by 5 = $\square$

C. Fill in the blank boxes

1.	6	Two Times	=	6 x 2
2.	3	Four Times	=	
3.	4	Three Times	=	
4.	9	Two Times	=	
5.	2	Nine Times	=	
6.	5	Four Times	=	
7.	4	Five Times	=	

See

4 x 5 = 20 (4 five Times) 

Now re-arrange 5 x 4 = 20 (5 four Times) 

Still, 20

You can see 4 x 5 = 20 | 4 x 5 and 5 x 4

5 x 4 = 20 | give same answer

or 4 x 5 = 5 x 4

Similarly 3 x 6 = 18

6 x 3 = 18

2 x 7 = 14

7 x 2 = 14

D. Tick ✓ mark if the statement is TRUE.

* 4 x 5 = 5 x 4 ✓

(1) 3 x 7 = 6 x 3 (2) 6 x 4 = 4 x 6

(3) 7 x 5 = 6 x 7 (4) 9 x 6 = 6 x 9

(5) 8 x 8 = 8 x 6 (6) 3 x 7 = 7 x 3

Table of Multiplication

Table of 2 :

2 x 1 = 2	2 Ones are 2
2 x 2 = 4	2 Twos are 4
2 x 3 = 6	2 Threes are 6
2 x 4 = 8	2 Fourss are 8
2 x 5 = 10	2 Fives are 10
2 x 6 = 12	2 Sixes are 12
2 x 7 = 14	2 Sevens are 14
2 x 8 = 16	2 Eights are 16
2 x 9 = 18	2 Nines are 18
2 x 10 = 20	2 Tens are 20

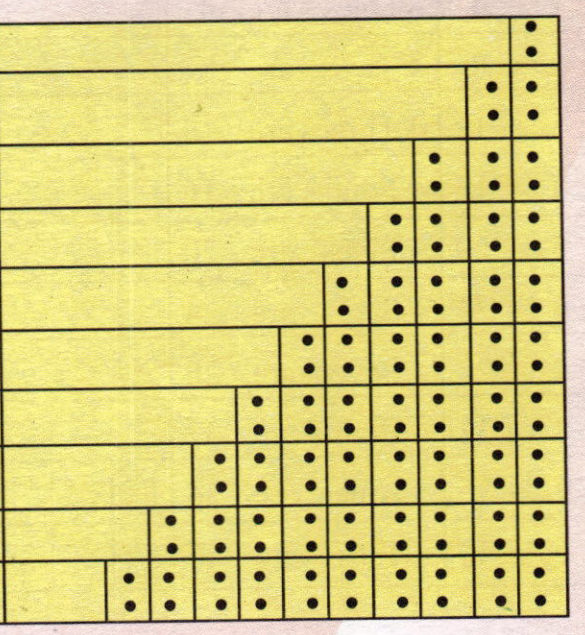


Table of 3 :

3 x 1 = 3	3 Ones are 3
3 x 2 = 6	3 Twos are 6
3 x 3 = 9	3 Threes are 9
3 x 4 = 12	3 Fourss are 12
3 x 5 = 15	3 Fives are 15
3 x 6 = 18	3 Sixes are 18
3 x 7 = 21	3 Sevensare 21
3 x 8 = 24	3 Eights are 24
3 x 9 = 27	3 Nines are 27
3 x 10 = 30	3 Tens are 30

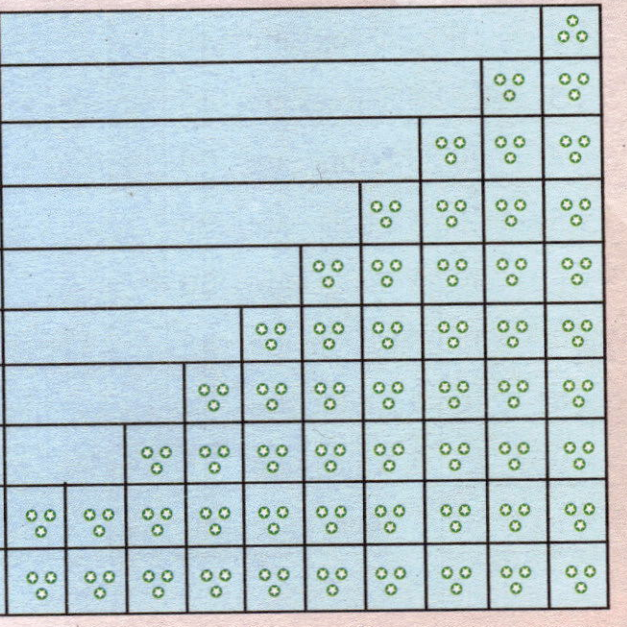


Table of 4 :

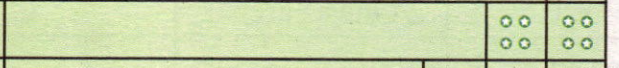
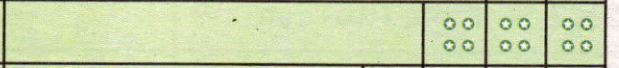
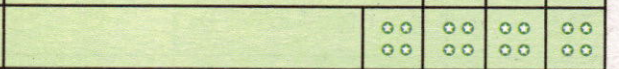
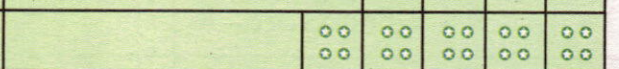
4 x 1 = 4	4 Ones are 4	
4 x 2 = 8	4 Twos are 8	
4 x 3 = 12	4 Threes are 12	
4 x 4 = 16	4 Fourss are 16	
4 x 5 = 20	4 Fives are 20	
4 x 6 = 24	4 Sixes are 24	
4 x 7 = 28	4 Sevensare 28	
4 x 8 = 32	4 Eights are 32	
4 x 9 = 36	4 Nines are 36	
4 x 10 = 40	4 Tens are 40	

Table of 5 :

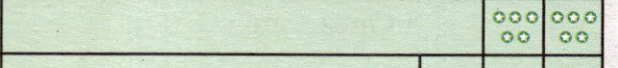
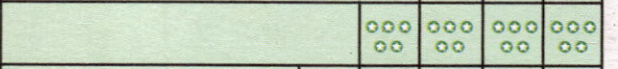
5 x 1 = 5	5 Ones are 5	
5 x 2 = 10	5 Twos are 10	
5 x 3 = 15	5 Threes are 15	
5 x 4 = 20	5 Fours are 20	
5 x 5 = 25	5 Fives are 25	
5 x 6 = 30	5 Sixes are 30	
5 x 7 = 35	5 Sevensare 35	
5 x 8 = 40	5 Eights are 40	
5 x 9 = 45	5 Nines are 45	
5 x 10 = 50	5 Tens are 50	

Table of 6 :

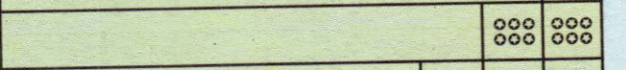
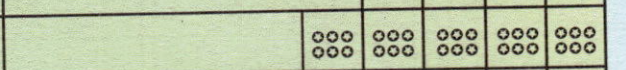
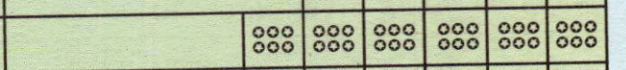
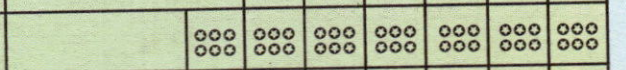
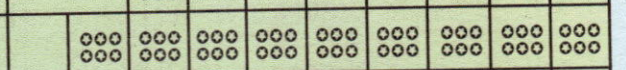
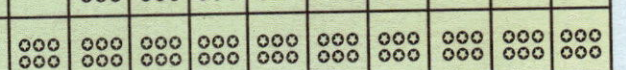
6 x 1 = 6	6 Ones are 6	
6 x 2 = 12	6 Twos are 12	
6 x 3 = 18	6 Threes are 18	
6 x 4 = 24	6 Fours are 24	
6 x 5 = 30	6 Fives are 30	
6 x 6 = 36	6 Sixes are 36	
6 x 7 = 42	6 Sevens are 42	
6 x 8 = 48	6 Eights are 48	
6 x 9 = 54	6 Nines are 54	
6 x 10 = 60	6 Tens are 60	

Table of 7 :

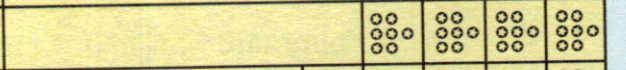
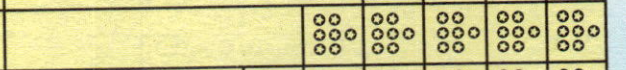
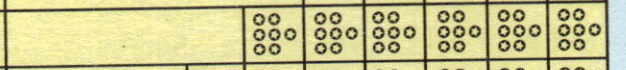
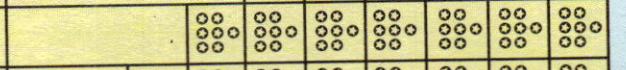
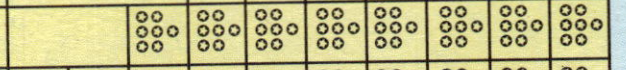
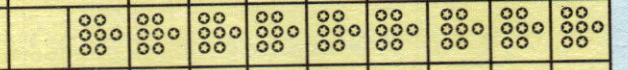
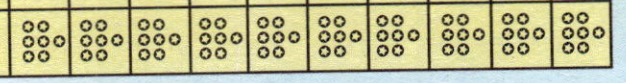
7 x 1 = 7	7 Ones are 7	
7 x 2 = 14	7 Twos are 14	
7 x 3 = 21	7 Threes are 21	
7 x 4 = 28	7 Fours are 28	
7 x 5 = 35	7 Fives are 35	
7 x 6 = 42	7 Sixes are 42	
7 x 7 = 49	7 Sevens are 49	
7 x 8 = 56	7 Eights are 56	
7 x 9 = 63	7 Nines are 63	
7 x 10 = 70	7 Tens are 70	

Table of 8 :

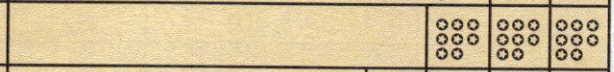
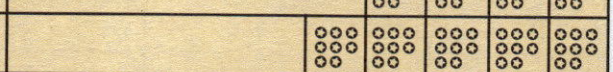
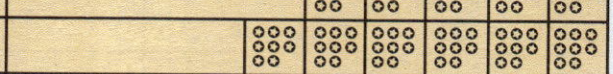
8 x 1 = 8	8 Ones are 8	
8 x 2 = 16	8 Twos are 16	
8 x 3 = 24	8 Threes are 24	
8 x 4 = 32	8 Fours are 32	
8 x 5 = 40	8 Fives are 40	
8 x 6 = 48	8 Sixes are 48	
8 x 7 = 56	8 Sevens are 56	
8 x 8 = 64	8 Eights are 64	
8 x 9 = 72	8 Nines are 72	
8 x 10 = 80	8 Tens are 80	

Table of 9 :

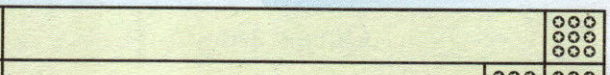
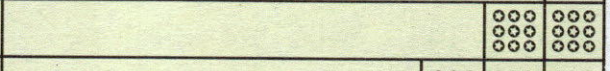
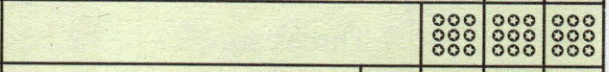
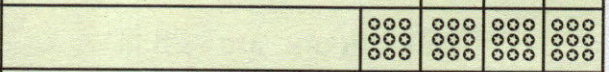
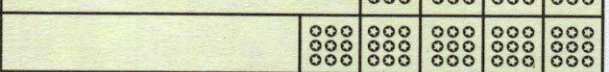
9 x 1 = 9	9 Ones are 9	
9 x 2 = 18	9 Twos are 18	
9 x 3 = 27	9 Threes are 27	
9 x 4 = 36	9 Fours are 36	
9 x 5 = 45	9 Fives are 45	
9 x 6 = 54	9 Sixes are 54	
9 x 7 = 63	9 Sevens are 63	
9 x 8 = 72	9 Eights are 72	
9 x 9 = 81	9 Nines are 81	
9 x 10 = 90	9 Tens are 90	

Table of 10

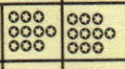
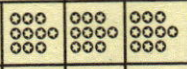
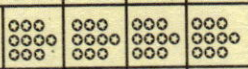
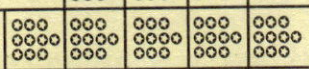
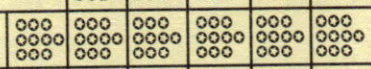
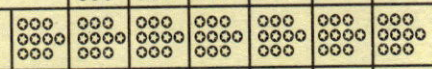
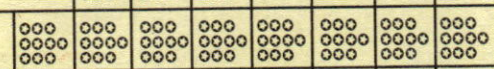
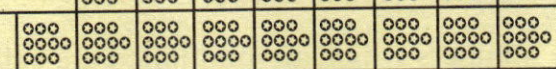
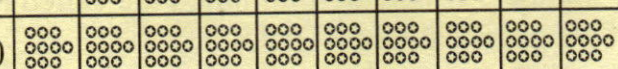
10 x 1 = 10	10 Ones are 10		1 Tens
10 x 2 = 20	10 Twos are 20		2 Tens
10 x 3 = 30	10 Threes are 30		3 Tens
10 x 4 = 40	10 Fours are 40		4 Tens
10 x 5 = 50	10 Fives are 50		5 Tens
10 x 6 = 60	10 Sixes are 60		6 Tens
10 x 7 = 70	10 Sevens are 70		7 Tens
10 x 8 = 80	10 Eights are 80		8 Tens
10 x 9 = 90	10 Nines are 90		9 Tens
10x10 =100	10 Tens are 100		10 Tens

Table from 1 to 10

1	2	3	4	5	6	7	8	9	10
2	4	6	8	10	12	14	16	18	20
3	6	9	12	15	18	21	24	27	30
4	8	12	16	20	24	28	32	36	40
5	10	15	20	25	30	35	40	45	50
6	12	18	24	30	36	42	48	54	60
7	14	21	28	35	42	49	56	63	70
8	16	24	32	40	48	56	64	72	80
9	18	27	36	45	54	63	72	81	90
10	20	30	40	50	60	70	80	90	100

Learn these by heart first in order then in reverse order.

Multiplying two-digit number by a single-digit number

EXAMPLE There are 32 students in a row. How many are there in 3 rows.

Solution: students in one row → 32

students in 3 rows → 32 x 3

Step One: Multiply Ones (here 2) by 3
write under ones digit → 6

Step Two: Multiply Tens (here 3) by 3
write under Tens → 9
Your answer → 96

$$\begin{array}{r} 32 \\ \times\ 3 \\ \hline 96 \end{array}$$

(The numbers which are multiplied are called MULTIPLICANDS and the result we get is called PRODUCT)

Here 32 and 3 are Multiplicands and result or answer 96 is the Product of 32 and 3.

EXAMPLE Multiply 31 by 4

Solution:

- First write in vertical column
- Multiply Ones by 4 = 1 x 4 = 4
  write under Ones (4)
- Multiply Tens by 4 (3 x 4 = 12)
  write under Tens (12)
  but 12 cannot be written under Tens column
  So write 2 under Tens and 1 under Hundreds

Multiplicands →

Product →

H	T	O
	3	1
	x	4
1	2	4

EXERCISE

Multiply:

1. $\begin{array}{r} 24 \\ \times\ 2 \\ \hline \end{array}$
2. $\begin{array}{r} 42 \\ \times\ 3 \\ \hline \end{array}$
3. $\begin{array}{r} 12 \\ \times\ 4 \\ \hline \end{array}$
4. $\begin{array}{r} 64 \\ \times\ 2 \\ \hline \end{array}$
5. $\begin{array}{r} 23 \\ \times\ 3 \\ \hline \end{array}$
6. $\begin{array}{r} 61 \\ \times\ 5 \\ \hline \end{array}$

7. There are 7 days in a week. How many days will be there in 31 weeks?
8. There are 5 students in a row. How many students are there in 23 rows?

Multiplication involving carrying

EXAMPLE Multiply 16 by 4.

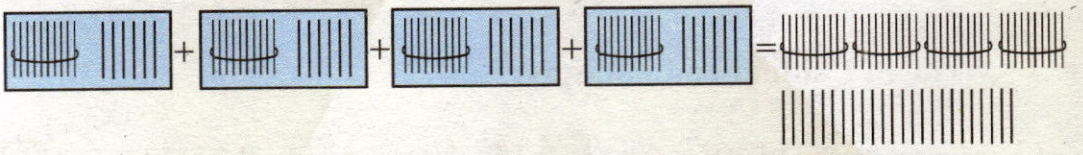
	2	
	T	O
	1	6
x		4
6	2	4

Illustration:

Step One: Multiply Ones by 4 = 6 x 4 = 24
We get 24 which has 2 Tens and 4 Ones. We can only write Ones under Ones. So we write 4 and keep 2 Tens as carry.

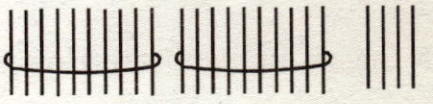
Step Two: Multiply Tens by 4 = 1 x 4 = 4
We get 4 Tens. We already have 2 Tens from multiplication of Ones (6) by 4. So add these Tens also. (4+2) Now we have 6 Tens. So write this under Tens. You get 64.

This can be well explained using sticks and rubber bands by demonstration.

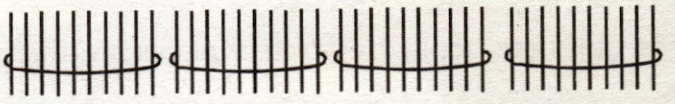


(24 Ones)

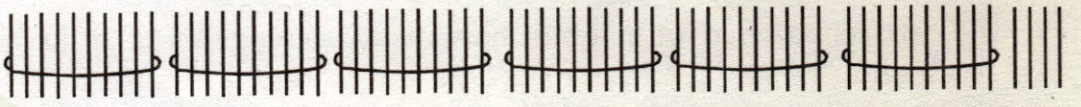
(24 re-group in Two Tens and 4 Ones



(2 Tens, 4 Ones)

and 

(4 Tens)



(6 Tens, 4 Ones)

EXERCISE

Multiply:

1. 29 x 2 = ____

2. 64 x 3 = ____

3. 51 x 3 = ____

4. 15 x 3 = ____

5. 85 x 6 = ____

6. 27 x 5 = ____

7. 32 x 7 = ____

8. 54 x 8 = ____

9. 12 x 8 = ____

10. 17 x 4 = ____

11. 54 x 3 = ____

12. 46 x 6 = ____

Write in Column and multiply:

13. 27 x 5 = ☐ **14.** 15x 4 = ☐ **15.** 29 x 3 = ☐ **16.** 54 x 2 = ☐

Statement Problems:

17. There are 5 fingers in one hand. How many fingers are there in 26 hands?

18. There are 48 pages in a note-book. How many pages are there in 3 such note-books?

19. If 42 passengers can sit in a bus, how many passengers can sit in 5 such buses?

CHAPTER - 5

Place Value

See the following number

9 9 9

This is read as Nine hundred ninety-nine

From right; first 9 is only 9

second 9 is ninety 90

and third 9 is nine hundred 900

You see, in a number as we move from right to left the value of numeral increases 10 times in each step.

9 9 9

9 (Nine)

90 (Ninety)

900 (Nine hundred)

900 + 90 + 9 = 999

9 when written alone is only 9 but when used in a number its value depends on its place. This is called its Place Value.

in 1 3 5 Place Value of 1 is 100

Place Value of 3 is 30

Place Value of 5 is 5

in 4 5 6 Place Value of 4 is 400

Place Value of 5 is 50

Place Value of 6 is 6

Tip: Read the number loudly and attentively. You will get the Place Value of each number as 3 7 8

300 ← 378 → 70, 8

6 7 5

or

			5
+		7	0
+	6	0	0
	6	7	5

6	7	5
Hundreds	Tens	Ones
		5
	7	0
6	0	0
6	7	5

EXERCISE

Write as shown in the example

EXAMPLE 586 = 500 + 80 + 6

(1) 300 =

(2) 204 =

(3) 685 =

(4) 719 =

(5) 307 =

(6) 680 =

(7) 503 =

EXAMPLE 300 + 40 + 7 = 3 4 7

(1) 100 + 7 =

(2) 300 + 70 + 1 =

(3) 400 + 60 =

(4) 300 + 20 + 9 =

(5) 500 + 70 + 8 =

(6) 400 + 80 + 7 =

(7) 600 + 50 + 1 =

Write the Place value of the following digits - (as shown in the example)

EXAMPLE 3 in 376 = 3 Hundreds or 300

(1) 4 in 145 = or

(2) 2 in 238 = or

(3) 7 in 467 = or

(4) 5 in 458 = or

(5) 8 in 809 = or

(6) 8 in 687 = or

(7) 8 in 678 = or

(8) 6 in 650 = or

Write the Place (Ones, Tens or Hundreds) of the encircled number.

3 (7) 8 → 7 is at Tens Place

(2) 5 8 → is at Place

1 3 (4) → is at Place

6 (3) 4 → is at Place

(7) 4 1 → is at Place

Adding Rupees to Rupees and Paise to Paise

It is like any other addition sum.

EXAMPLE Shahida had 5 rupees. Her mother gave her 3 more rupees. Now how much rupees does she has?

Shahida has	5	rupees	Compare	5
Her mother gave	+ 3	rupees		+ 3
Total rupees she has	8	rupees		8

Rupees is also written as Rs

Add:

(1) Rs. 4 + 7 = ____

(2) Rs. 60 + 5 = ____

(3) Rs. 40 + 10 = ____

(4) Rs. 10 + 3 = ____

(5) Rs. 10 + 2 = ____

(6) Paise 60 + 5 = ____

(7) Paise 50 + 10 = ____

(8) Paise 35 + 2 = ____

(9) Paise 30 + 10 = ____

(10) Paise 40 + 5 = ____

EXAMPLE Add 22 rupees and 35 rupees.

Solution:

22	rupees
+ 35	rupees
57	rupees

Adding Rupees and Paise to Rupees and Paise

EXAMPLE Add 15 rupees 35 Paise to 10 rupees 30 Paise

Solution: Make Two columns of Rupees and Paise with Paise on right side.

	Rupees	Paise
	15	35
+	10	30
Now add as usual	25	65

25 Rupees 65 Paise

EXAMPLE Farida bought apples for 7 rupees 20 paise and bananas for 2 rupees 25 paise. How much did she spend?

Solution:

	Rupees	Paise
Farida bought Apples	7	20
,, ,, Bananas	2	25
Total	9	45

Farida spent 9 rupees 45 paise.

EXERCISE

Add:

(1)

Rs.	P.
60	70
+ 25	20

(2)

Rs.	P.
21	25
+ 4	50

(3)

Rs.	P.
75	20
+ 15	20

(4)

Rs.	P.
20	20
+ 30	30

(5)

Rs.	P.
10	05
+ 05	10

(6)

Rs.	P.
90	70
+ 10	20

CHAPTER - 6

Comparision of numbers

Put in the ☐ the sign of 'Smaller than' (<) or 'Greater than'(>).

(1)	8	☐	5	(2)	83	☐	81
(3)	431	☐	413	(4)	83	☐	19
(5)	347	☐	473	(6)	191	☐	911
(7)	326	☐	623	(8)	555	☐	505
(9)	444	☐	404	(10)	696	☐	669
(11)	396	☐	369	(12)	699	☐	969
(13)	876	☐	786	(14)	996	☐	699

The pointed end
of the symbol (> or <)
directs towards
smaller number

CHAPTER - 7

Addition and Subtraction of 2 and 3-digit numbers with carry/borrow

EXAMPLE Add 16 and 8

$$\begin{array}{r} \overset{1}{} \\ 16 \\ +\ 8 \\ \hline 24 \end{array}$$

Add 6 ones and 8 ones. You get 14 ones or 1 Tens and 4 ones. Write 4 ones under ones and carry 1 Tens to Tens and again add Tens.

1 Ten + 1 Ten (obtained from adding ones) = 2 Tens

or 2 Tens 4 Ones = 24

EXAMPLE

add ones = 4+8 = 12

12 or 2 ones & 1 Tens

write 2 at ones and carry 1 (Tens) to tens column

$$\begin{array}{r} 1 \\ 54 \\ +\ 38 \\ \hline 92 \end{array}$$

Add 5 tens, 3 Tens and 1 Tens (of carry) = 9 Tens write under Tens column

EXERCISE

(1) $\begin{array}{r} 13 \\ +\ 9 \\ \hline \end{array}$ (2) $\begin{array}{r} 17 \\ +\ 6 \\ \hline \end{array}$ (3) $\begin{array}{r} 45 \\ +\ 8 \\ \hline \end{array}$ (4) $\begin{array}{r} 74 \\ +\ 8 \\ \hline \end{array}$ (5) $\begin{array}{r} 36 \\ +\ 6 \\ \hline \end{array}$ (6) $\begin{array}{r} 19 \\ +\ 5 \\ \hline \end{array}$

(7) $\begin{array}{r} 18 \\ +\ 8 \\ \hline \end{array}$ (8) $\begin{array}{r} 88 \\ +\ 6 \\ \hline \end{array}$ (9) $\begin{array}{r} 44 \\ +\ 9 \\ \hline \end{array}$ (10) $\begin{array}{r} 55 \\ +\ 9 \\ \hline \end{array}$ (11) $\begin{array}{r} 38 \\ +\ 8 \\ \hline \end{array}$ (12) $\begin{array}{r} 81 \\ +\ 9 \\ \hline \end{array}$

13. 29 + 9 = ☐ **14.** 25 + 9 = ☐ **15.** 36 + 6 = ☐ **16.** 26 + 7 = ☐

(17) $\begin{array}{r} 54 \\ +\ 38 \\ \hline \end{array}$ (18) $\begin{array}{r} 36 \\ +\ 58 \\ \hline \end{array}$ (19) $\begin{array}{r} 55 \\ +\ 17 \\ \hline \end{array}$ (20) $\begin{array}{r} 25 \\ +\ 57 \\ \hline \end{array}$

Statement Problems:

21. There are 35 books in one shelf and 28 books in another shelf. How many books are there in both the shelves.
22. Aslam bought flour for Rs. 55 and rice for Rs.38. How munch did he spend?
23. Swaliha has 25 toffees and Abida has 19 toffees. How many toffees do they have in all?
24. There are 48 Namazis in the first row in a mosque and 35 in the second row. How many Namazis are there in the two rows.

Adding 3-digit numbers

EXAMPLE Add 247 and 134

Solution :

	H	T	O
		(1)	
	2	4	7
+	1	3	4
	3	8	(1) 1

= 381

EXERCISE

Add:

(1) 635 + 209 = ____

(2) 456 + 438 = ____

(3) 488 = ____

(4) 106 = ____

(5) 514 + 178 = ____

(6) 762 + 229 = ____

(7) 635 + 48 = ____

(8) 575 + 315 = ____

(9) 174 + 206 = ____

(10) 184 + 706 = ____

(11) 388 = ____

(12) 485 = ____

EXAMPLE

	H	T	O
	(1)		
	3	8	7
+	2	5	2
	6	(1)3	9

= 639

Step - I : add ones, 7 + 2 = 9 write under ones

Step - II : add tens , 8 + 5 = 13 (13 Tens or 1 Hundreds + 3 Tens) write 3 Tens under Tens and bring or carry 1 Hundreds to Hundreds column and add there.

Step - III : Add hundreds 3 and 2 and 1 (the carried number) = 6, write under Hundreds.

Your answer is 6 3 9

EXERCISE

Add:

(1) 675 + 150 = ____

(2) 321 + 295 = ____

(3) 470 + 172 = ____

(4) 274 + 473 = ____

(5) 493 + 341 = ____

(6) 283 + 151 = ____

Write in Column and add:

(7) 671 + 257

(8) 188 + 630

(9) 394 + 114

EXAMPLE Add 426 and 187

H	T	O
(1)	(1)	
4	2	6
+1	8	7
6	(1) 1	(1) 3
6	1	3

= 613

Explanation as illustrated earlier

Simplified Method

$$\begin{array}{r} 4 \quad 2 \quad 6 \\ +\ 1 \quad 8 \quad 7 \\ \hline 6 \quad 1 \quad 3 \\ \hline \end{array}$$

Note: After adding, the carried number may be cut as shown above.

EXERCISE

Add:

1. 456 + 289 = ____
2. 695 + 146 = ____
3. 758 + 164 = ____
4. 666 + 245 = ____
5. 555 + 277 = ____
6. 544 + 278 = ____
7. 698 + 198 = ____
8. 389 + 111 = ____
6. 689 + 301 = ____
10. 398 + 102 = ____

Adding three 3-digit numbers

EXAMPLE Add 542, 245 and 156

Step I - write in vertical column

Step II - add as explained earlier

	①	①	
	5	4	2
	2	4	5
	1	5	6
	9	4	3

See:

Ex. (1)

	1	1	
	4	3	5
+	2	4	3
+	1	5	6
	8	3	6

Ex (2)

		1	
	3	8	4
+	1	0	2
+	2	0	5
	6	9	1

Ex (3)

	5	4	2
+	3	1	1
+	1	3	4
	9	8	7

EXERCISE

Add:

(1)

	1	2	6
+	3	4	2
+	2	5	4

(2)

	5	2	3
+	2	3	4
+	1	2	5

(3)

	6	7	8
+	2	0	1
+	1	2	0

(4)

	3	3	2
+	3	2	3
+	4	1	7

(5)

	5	7	2
+	2	1	7
+	1	5	3

(6)

	1	8	2
+	7	0	0
+	3	5	9

(7)

	5	0	0
+	2	3	8
+	1	8	5

(8)

	4	3	5
+	1	7	3
+	3	0	4

Word Problem:

9. In a mosque 225 persons offered Fajr Prayer, 130 persons Zuhr prayer and 200 persons offered Asr prayers. Find the total number of persons who offered prayers.

10. In an orchard there are 348 mango trees, 138 guava trees and 140 Jamun trees. Find the total number of trees in the orchard.

11. Najmi has 348 rupees, Abdullah 266 rupees and Zia 222 rupees. How many rupees do they have in all?

12. Akram bought a table for Rs. 522, a chair for Rs. 245 and 2 stools for Rs. 145. How much did he spend?

Subtraction

EXAMPLE Subtract 6 from 34

Solution :

2	1
~~3~~	4
–	6
2	8

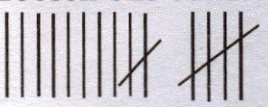
Step One: Subtract Ones from Ones. 4 – 6 not possible. It is not possible to take out 6 from 4, since 4 is less than 6. So we borrow 1 Tens from our neighbourhood. Now 1 Ten (or 10) and 4 ones become 14 ones. On subtracting 6 ones from 14 ones we get 8 ones.

Step Two: In Tens column, now we have only 2 Tens. We copy it under Tens column.

= 3 4

3 bundles of Tens = 3 Tens and 4 loose

Loosen one bundle of Tens



14 loose sticks

Now take out 6 loose sticks from 14. ⟶ 14 - 6 =8

We are left with 2 bundles of Ten sticks = 2 Tens

and 8 loose sticks = 8 Ones

2 Tens + 8 Ones = 28

In subtraction, we subtract Ones from Ones, Tens from Tens and Hundreds from Hundreds, as we do in addition.

EXAMPLE Saleem had 22 marbles. He gave 8 to his brother. How many marbles does he have now?

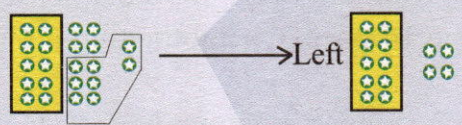
Solution: Saleem has 22 marbles

If 22 marbles are in packets of 10 each it will be like this

2 Tens 2 ones

He gave 8 marbles to his brother.

To give 8 marbles he has to open one packet of 10 marbles. Now he will take out 8 from 12 marbles and give them to his brother. Now he is left with only one packet of Ten marbles and 4 marbles. i.e. 14



given away 10 + 4

14 marbles

Tens	Ones
①+① →	⑩ 12
2	2
–	8
→ 1	4

or

①	⑫
2	2
–	8
1	4

EXERCISE

Subtract:

1.	42 − 6	**2.**	41 − 5	**3.**	53 − 6	**4.**	73 − 7	**5.**	55 − 9
6.	50 − 2	**7.**	75 − 7	**8.**	36 − 8	**9.**	21 − 3	**10.**	60 − 3

Subtracting Two-digit number from Two-digit number

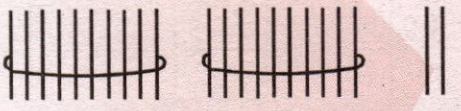
EXAMPLE Nadeem has 22 pencils. He gave 15 of them to Ehsan. How many pencils does Nadeem have?

Solution: $22 - 15 = \boxed{?}$

$$\begin{array}{r} 22 \\ -15 \\ \hline \end{array}$$

1+1 = 10+2=12

$$\begin{array}{rr} 2 & 2 \\ -\ 1 & 5 \\ \hline 0 & 7 \\ \hline \end{array}$$



2 packets of Ten Pencils 2 loose pencils

[Since 5 pencils cannot be taken from 2 loose pencils. So Nadeem opens one packet of 10 pencils. Now he has 10 and 2 i.e. 12 pencils. He gives 5 loose and one packet of ten pencils to Ehsan from there. He is left with 7 loose pencils.]

One packet of Ten Pencils 10 loose pencils (One packet of 10 Pencils) 2 loose pencils

to take out 15 pencils we will take one packet of Ten pencils and 5 from 12 loose pencils.

now Nadeem has 7 loose pencils

EXERCISE

Subtract:

1.
$$\begin{array}{r} 72 \\ -\,18 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 76 \\ -\,47 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 91 \\ -\,22 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 56 \\ -\,27 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 90 \\ -\,47 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 71 \\ -\,56 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 71 \\ -\,65 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 68 \\ -\,39 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 70 \\ -\,15 \\ \hline \end{array}$$

10.
$$\begin{array}{r} 83 \\ -\,14 \\ \hline \end{array}$$

Write in column and subtract:

11. 34 – 15 **12.** 60 – 29 **13.** 80 – 17 **14.** 70 – 23

Statement Problem :

15. There are 37 Surahs in Para Am of the Holy Qur'an. Hamida read 19 Surahs. How many Surahs are now left to be read by her?

16. Aslam bought 50 chickens. 13 of them died. How many chickens are left now?

17. Alia purchased 60 red and green bangles for her sister . If she purchased 24 green bangles, how many red bangles were purchased by her?

Subtracting 3-digit number from a 3-digit number

EXAMPLE (On expanding Tens) Subtract 178 from 292

$$\begin{array}{r} 2\,9\,2 \\ -\,1\,7\,8 \\ \hline \\ \hline \end{array}$$

	H	T	O
		8+1⟶	12
	2	~~9~~	2
−	1	7	8
	1	1	4

To subtract 8 ones from 2 ones, first we have to borrow one Tens from 9 Tens leaving 8 Tens there. Now one Ten and 2 Ones give 12 Ones. 8 Ones are taken away from 12 Ones⟶ 12 – 8 = 4.Written under Ones. Now 7 Tens are taken away from 8 Tens (remaining 8 Tens as from 9 Tens, one Ten has been borrowed by Ones) we get one Ten (8 – 7 =1) written under Tens Column. Similary 2 Hundreds – 1 Hundred = 1 Hundred, written under column of hundreds.

EXERCISE

Subtract:

1. $\begin{array}{r} 9\,4\,2 \\ -\,7\,0\,8 \\ \hline \\ \hline \end{array}$ **2.** $\begin{array}{r} 9\,9\,1 \\ -\,7\,7\,8 \\ \hline \\ \hline \end{array}$ **3.** $\begin{array}{r} 8\,9\,2 \\ -\,6\,7\,9 \\ \hline \\ \hline \end{array}$ **4.** $\begin{array}{r} 5\,5\,6 \\ -\,3\,3\,8 \\ \hline \\ \hline \end{array}$

5. $\begin{array}{r} 7\,1\,0 \\ -\,4\,0\,5 \\ \hline \\ \hline \end{array}$ **6.** $\begin{array}{r} 7\,8\,6 \\ -\,6\,7\,8 \\ \hline \\ \hline \end{array}$ **7.** $\begin{array}{r} 8\,7\,4 \\ -\,3\,6\,8 \\ \hline \\ \hline \end{array}$ **8.** $\begin{array}{r} 8\,9\,6 \\ -\,8\,0\,9 \\ \hline \\ \hline \end{array}$

9. Kaleem has 262 goats. Only 248 of them give milk. Tell how many of them do not give milk.

10. Naseem had 966 rupees. He bought a watch for 448 rupees. How much money is now left with him?

EXAMPLE Subtract 775 from 947.

	H	T	O
	8	14	
	~~9~~	~~4~~	7
	7	7	5
	1	7	2

(i) Subtract Ones from Ones $7 - 5 = 2$ write under Ones column.

(ii) Try subtracting Tens from Tens. Since 4 is less than 7 we cannot do subtraction. We borrow one hundred from 9 hundred (one hundred = 10 Tens).

Now 4 Tens and 10 Tens are 14 Tens; 14 Tens – 7 Tens = 7 Tens; write under Tens.

(iii) Subtract Hundreds from Hundreds. (8 –7) Hundred = One hundred write under Hundreds.

EXERCISE

Subtract:

1. 970 − 684

2. 768 − 587

3. 536 − 354

4. 457 − 267

5. 947 − 794

6. 308 − 126

7. 606 − 465

8. 806 − 760

9. 520 students live in a boarding house. If 280 of them live on the first floor and the rest on the second floor. Then how many students live on the second floor?

10. Mahmood purchased 750 bricks out of which he used 570 in the repair of his home. How many bricks are left ?

EXAMPLE

Subtract 468 from 632 (On expanding tens and hundreds

$$\begin{array}{rccl} & & 12 & \\ & 5 & \cancel{2} & 10+2=12 \\ & \cancel{6} & \cancel{3} & \cancel{2} \\ - & 4 & 6 & 8 \\ \hline & 1 & 6 & 4 \\ \hline \end{array}$$

Explanation as earlier

EXERCISE

Write in column and subtract

1. 324 – 168 **2.** 423 – 259 **3.** 506 – 347

4. 829 –726 **5.** 913 – 769 **6.** 710 – 529

7. There are 378 steps in Qutb Minar. Sajid and Majid went 199 steps. How many more steps do they need to go?

8. There are 286 verses (Ayats) in Surah Al-Baqra of the Holy Qur'an. Amir memorised 198 verses. How many more verses does he have to memorise?

[*To borrow a number means borrowing a number with its place value as in 432 borrowing 1 from 3 means borrowing 1 Ten from 3 Tens*]

CHAPTER - 8

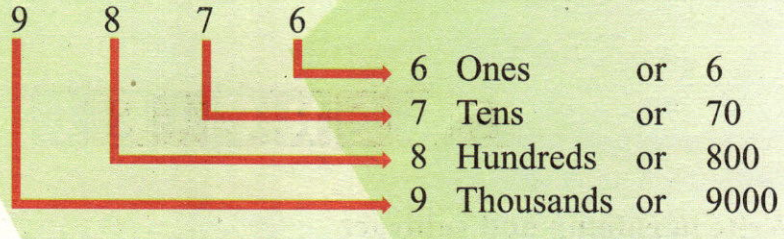
Place value in 4-digit number

EXAMPLE Write the place value of every digit in 4527

Solution:

In 4 5 2 7 the place value of 7 is 7 Ones or 7
" " " " 2 is 2 Tens or 20
" " " " 5 is 5 Hundreds or 500
" " " " 4 is 4 Thousands or 4000

Similarly:



9000 + 800 + 70 + 6

Read 9 thousand 8 hundred seventy six and you get the place value of each digit automatically.

EXERCISE

Write the place value of each digit in the following numbers.

1. 9812 = 9000 + 800 + 10 + 2
2. 8327 =
3. 5048 =
4. 4908 =
5. 3200 =
6. 7880 =
7. 9616 =
8. 3515 =
9. 7169 =
10. 3002 =

(***Hint:*** *The place value of zero is always 0 notwithstanding its place in a number*)

Write the number:

(i) $6000 + 500 + 20 + 8 = 6528$

(ii) $4000 + 700 + 70 + 1 =$

(iii) $5000 + 400 + 60 + 7 =$

(iv) $2000 + 900 + 30 + 9 =$

(v) $1000 + 600 + 70 + 5 =$

(vi) $900 + 4 + 7000 + 40 =$

(vii) $4 + 9000 + 90 + 900 =$

(viii) $90 + 900 + 9 + 9000 =$

(ix) $100 + 5 + 10 + 1000 =$

(x) $60 + 0 + 600 + 6000 =$

Changing order of two numbers does not alter the result of addition:

1.

12 +14	or	14 +12
26		26

2.

14 +15	or	15 +14
29		29

3.

215 +482	or	482 +215
697		697

EXERCISE

Find the sum and observe:

1.

515 +472	**or**	472 +515

2.

753 +169	**or**	169 +753

3.

17 +51 +24	**or**	51 +17 +24	or	17 +24 +51

4.

25 +13 +22	**or**	13 +22 +25

CHAPTER - 9

Addtion and Subtraction of 4-digit numbers (without carry)

Adding 4-digit numbers

EXAMPLE

Add:

	Th	H	T	O
	5	3	2	4
+	1	2	5	1
	6	5	7	5

	Th	H	T	O
	1		1	
	4	5	5	7
+	2	8	1	4
	7	(1) 3	7	(1) 1

EXERCISE

Add:

1. 7534 + 1251

2. 2106 + 5238

3. 1467 + 3078

4. 3751 + 1629

5. 1999 + 2345

6. 8354 + 1176

7. 4931 + 5088

8. 2666 + 8555

9. 2536 + 1765

10. 6139 + 1728

Subtraction of 4-digit numbers

EXAMPLE Subtract 3225 from 6666.

Solution:

	Th	H	T	O
	6	6	6	6
−	3	2	2	5
	3	4	4	1

EXAMPLE My brother earned Rs. 4265 and spent Rs. 2378. How much money does he have now?

Solution:

Earned	Rs.	$^{3}\cancel{4}$	$^{11}\cancel{2}$	$^{15}\cancel{6}$	$^{15}\cancel{5}$
Spent	Rs.	2	3	7	8
Saved (left)		1	8	8	7

or in short

Earned	4265
Spent	-2378
Saved	1887

EXERCISE

Subtract:

1. 8002 − 7655 =

2. 7698 − 5471 =

3. 6097 − 4016 =

4. 5008 − 3648 =

5. 7006 − 4098 =

6. 9533 − 4565 =

7. 9833 − 5976 =

8. 5275 − 2945 =

9. 4221 − 1888 =

CHAPTER - 10

Multiplication of 3 and 4-digit numbers by single digit nmber

EXAMPLE Multiply 143 by 2

H	T	O
1	4	3
	x	2
2	8	6

Solution :

Step one: Multiply Ones (3) by 2 = 3 x 2 = 6 write under Ones

Step Two: Multiply Tens (4) by 2 4 x 2 = 8 write under Tens

Step Three: Multiply Hundreds (1) by 2 = 1 x 2 = 2 write under Hundreds.

We get 2 8 6

EXAMPLE Multiply 2 5 4 by 3

H	T	O
(1)	(1)	
2	5	4
	x	3
7	(1) 6	(1) 2

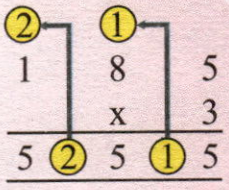
Solution :

Explanation:

- 4 Ones multiplied by 3 give 12 Ones or 1 Ten and 2 Ones. Ones written under Ones column and Tens (1) carried to Tens column to be added to the product of Tens (5) and 3.
- Multiply 5 Tens by 3 5 x 3 = 15 Tens. Add one carried. Then you get 16 Tens or 10 Tens (1 Hundred) and 6 Tens. Write 6 Tens under Tens column and carry one hundred to Hundreds column.
- Multiply 2 Hundreds by 3 = 2 x 3 = 6 Hundreds add 1 Hundred carried = 7 Hundreds. The result is 7 Hundreds 6 Tens 2 Ones or 762.

EXAMPLE On making one round of a playground one has to walk 185 metres. Hamid made 3 rounds. How much distance did he walk?

Solution: Distance walked in one round = 185 metres
Distance walked in 3 rounds = 3 x 185 metres



or

$$\begin{array}{r} 185 \\ \times\ 3 \\ \hline 555 \end{array}$$ metres

EXERCISE

Multiply:

1. $\begin{array}{r} 796 \\ \times\ 1 \\ \hline \end{array}$ **2.** $\begin{array}{r} 231 \\ \times\ 3 \\ \hline \end{array}$ **3.** $\begin{array}{r} 313 \\ \times\ 2 \\ \hline \end{array}$ **4.** $\begin{array}{r} 122 \\ \times\ 4 \\ \hline \end{array}$

5. $\begin{array}{r} 611 \\ \times\ 7 \\ \hline \end{array}$ **6.** $\begin{array}{r} 253 \\ \times\ 4 \\ \hline \end{array}$ **7.** $\begin{array}{r} 125 \\ \times\ 3 \\ \hline \end{array}$ **8.** $\begin{array}{r} 740 \\ \times\ 8 \\ \hline \end{array}$

9. $\begin{array}{r} 324 \\ \times\ 9 \\ \hline \end{array}$ **10.** $\begin{array}{r} 500 \\ \times\ 2 \\ \hline \end{array}$ **11.** $\begin{array}{r} 468 \\ \times\ 5 \\ \hline \end{array}$ **12.** $\begin{array}{r} 857 \\ \times\ 0 \\ \hline \end{array}$

Multiplying 4-digit numbers by a single digit number

EXAMPLE Multiply 1436 by 2.

Solution:

Th	H	T	O
1	4	3 x	6 2
2	8	7	2

EXERCISE

Multiply:

1. 1225 x 3 = _____

2. 2021 x 4 = _____

3. 4233 x 2 = _____

4. 1100 x 9 = _____

5. 1112 x 9 = _____

6. 1608 x 6 = _____

7. 4529 x 3 = _____

8. 2412 x 7 = _____

9. 3525 x 4 = _____

10. 2324 x 5 = _____

11. 4360 x 6 = _____

12. 4529 x 0 = _____

[**Hint:** *If we multiply any number by zero (0) we always get zero (0) as product.*]

CHAPTER - 11

Names of Months

Lunar Months (Islamic Months)

1. Muharram
2. Safar
3. Rabi-ul-Awwal
4. Rabi-uth-thani (Rabi-ul-Akhir)
5. Jamadi-ul-Awwal
6. Jamadi-uth-thani (Jamadi-ul-Akhir)
7. Rajab
8. Sha'ban
9. Ramzan (The month of Fasting)
10. Shawwal (The month of Eidul-Fitr)
11. Zee-Qa'da
12. Zil-Hijja (The month of Eid-e-Qurban & Hajj)

Lunar months are of 29 or 30 days. They start with the moon sighting and continue till the next moon sighting when the month changes. The year is counted after Hijrat of Prophet Muhammad (S.A.W) from Makkah to Madinah and therefore called Hijri. In Jan 2013 it is Hijri 1434.

Solar Months (Christian Calendar)

1.	January	31 days
2.	February	28 or 29 ,,
3.	March	31 ,,
4.	April	30 ,,
5.	May	31 ,,
6.	June	30 ,,
7.	July	31 ,,
8.	August	31 ,,
9.	September	30 ,,
10.	October	31 ,,
11.	November	30 ,,
12.	December	31 ,,

There are Twelve months in a year.

EXERCISE

I. Answer the following questions:

(1) When did Hijri Era begin?
(2) Name the first month of Hijri or Lunar Calendar
(3) Name the last month of Hijri Calendar.
(4) Which is the month of fasting?
(5) Which month comes before Jamadi-ul-Akhir?
(6) Which month comes after Rajab?
(7) Which is the fourth month of Hijri Calendar?
(8) In which month is Eid-ul-Fitr celebrated?
(9) Write in order the names of Hijri months.

II. Answer the following questions:

(1) When did the Christian era begin?
(2) Name the first month of the solar year?
(3) Name the last month of the solar calendar?
(4) Which is the fourth month of the solar calendar?
(5) Which month comes before June?
(6) Which month comes after August?
(7) Name the fifth month of the Christian year?
(8) Write names of all the 12 months of Christian year in order.

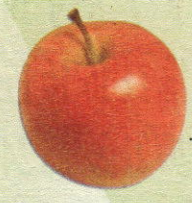
Calender 2014

CHAPTER - 12

Fractional Numbers

Whole and Part (Half, One fourth, Three - forth)

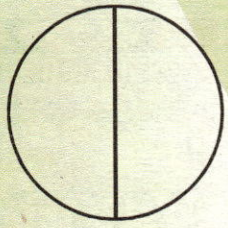
An apple cut into two equal parts

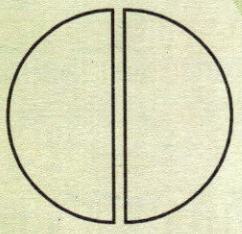


One (whole) apple

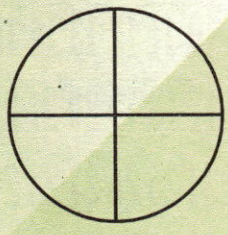
Cut into 2 parts Half

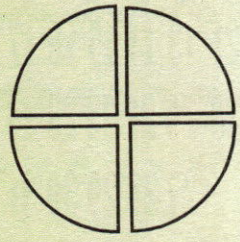
One-fourth (apple)





Cut into two parts (Half)

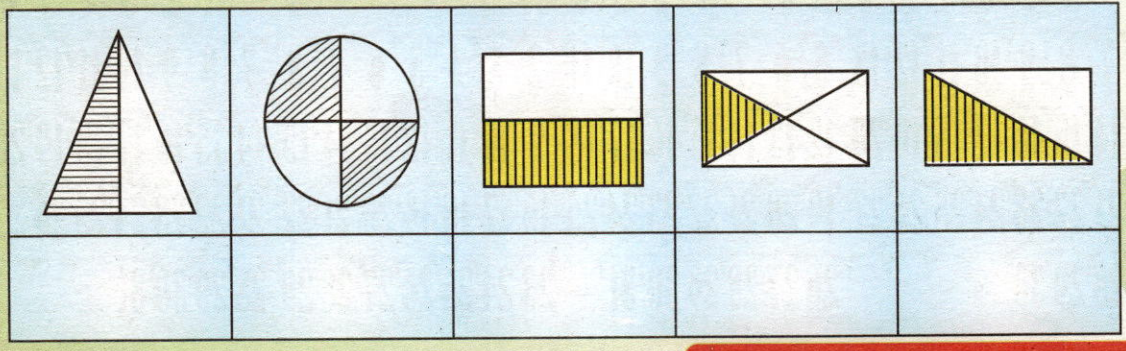




Cut into 4 equal parts (One-fourth)

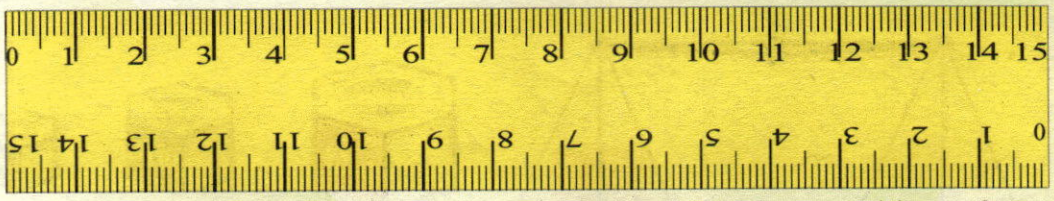
One fourth	+	One fourth	+	One fourth	+	One fourth	=	One (Whole)

Write below each figure for the shaded part



CHAPTER - 13 Unit of Length

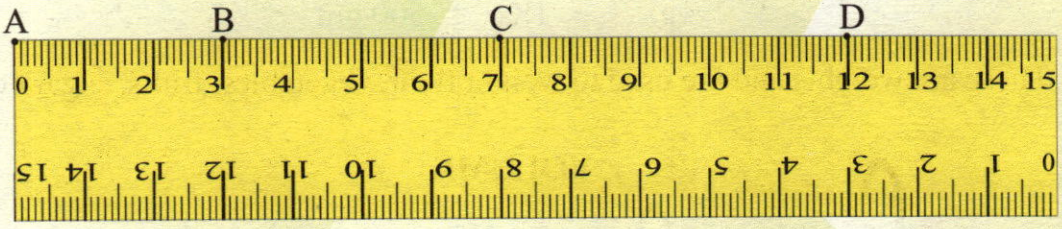
Standard Scale



It is a standard scale. It is a 15cm scale. It has marking of cm (centimetre) 1 to 15.

When we measure an object by a standard scale, we always get the same result.

EXAMPLE



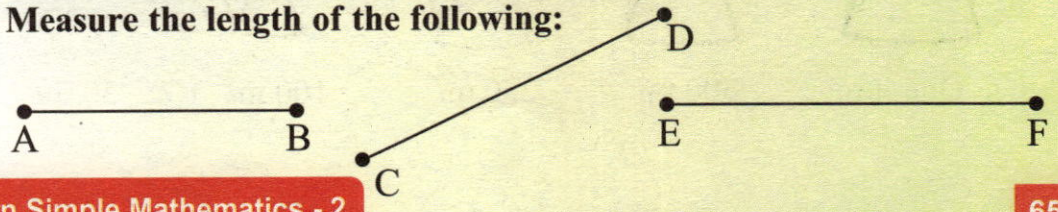
1. What is the distance between A and B = 3 cm
2. What is the distance between C and D = 5 cm

EXERCISE

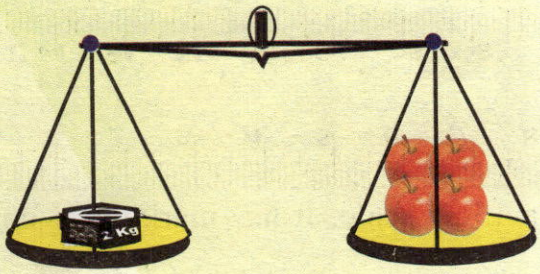
See the above picture and answer:

(1) Distance between B and C
(2) Distance between A and C
(3) Distance between A and D
(4) Distance between B and D
(5) Distance between A and B

Measure the length of the following:



Measure of Mass and Volume



20 Kg

10 Kg

5 Kg

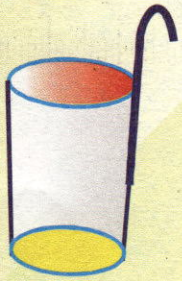
2 Kg

1Kg

500 gm

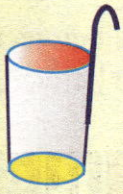
These are weights and are used to weight flour, vegetables, fruits, sugar etc.

VOLUME



1 *l*

500 m*l*



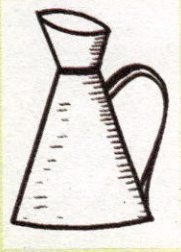
250 m*l*

100 m*l*

& 50 m*l*

These are measures of liquid as milk.

For oil as kerosene oil we use the following.



One litre

500 m*l*

250 m*l*

100 m*l*

& 50 m*l*

CHAPTER - 14

Indian Currency

Coins

Crurrency Notes

Note: Teachers should demonstrate and explain these currency notes and coins and their conversion. 1 rupee = 100 Paise.

EXERCISE

How many coins will you get for :

1 Rupee = _____ coins of 50 p.
1 Rupee = One coins of 50 p and _____ coins of 25 p.
2 Rupees = 4 coins of 25 p and _____ coins of 50 p.
5 Rupees = 4 coins of 50 p and _____ coins of 1 Rupee.
10 Rupees = 2 coins of 2 Rupee and _____ coins of 1 Rupee.

How many notes will you get for:

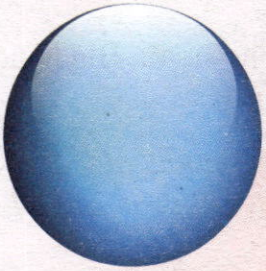
2 Rupees = _____ notes of one rupee.
10 Rupees = _____ notes of 2 rupees.
10 Rupees = _____ notes of 5 rupees.
20 Rupees = _____ notes of 5 rupees.
20 Rupees = _____ notes of 2 rupees.
20 Rupees = _____ notes of 10 rupees.
20 Rupees = _____ notes of one rupee.
50 Rupees = _____ notes of 10 rupees.
50 Rupees = _____ notes of 5 rupees.
50 Rupees = _____ notes of 20 rupees and one note of 10 rupees.

How many rupees are they?

100 Paise =
200 Paise =
300 Paise =
400 Paise =
600 Paise =
700 Paise =
800 Paise =
900 Paise =
1000 Paise =

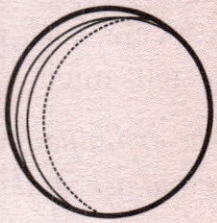
Solid Shapes

Spherical Objects



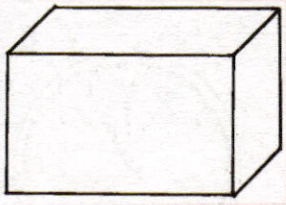
Sphere

Ball

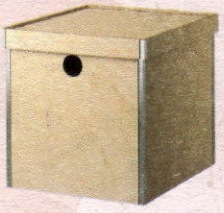


Ball

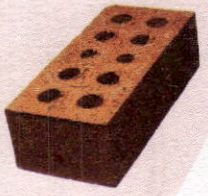
Pot



Cuboid

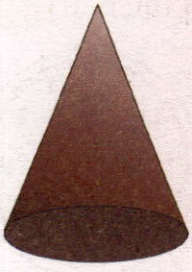


Box



Brick

Butter



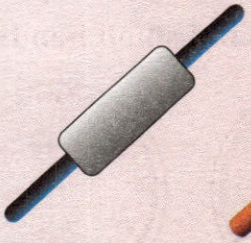
Cone

Ice Cream

Funnel

Cylinder

Poppins



Belon

Pipe

Students Should be explained well the shape of solid object with concrete example by showing these objects in the classroom.

CHAPTER - 16

Telling Time

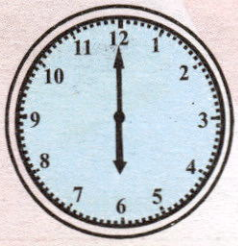
See the following clocks

A clock has two hands, one big and one small. Big hand tells minute and small hand tells hour.

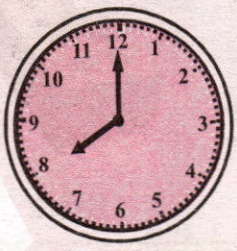
Students should be explained well how to tell time. Bring model of a clock in the classroom and ask students to tell time repeatedly till they are able to tell time by seeing the clock.

Tell Time

O' Clock

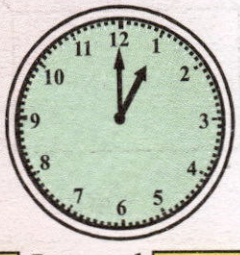


Fajr ☐



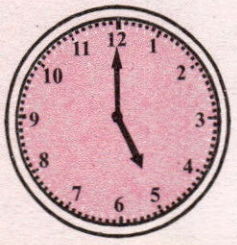
Take breakfast ☐

Go to School ☐



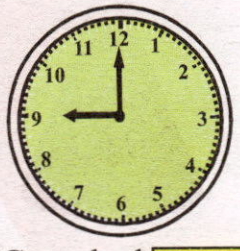
Interval ☐

School off ☐
Go home



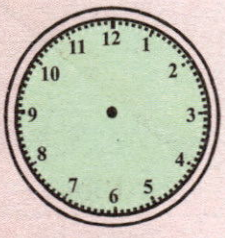
Play ☐

Take dinner ☐

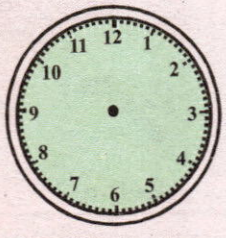


Go to bed ☐

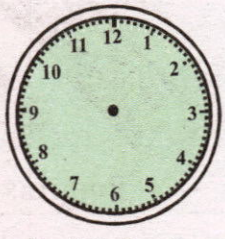
Make big and small hands to show the time:



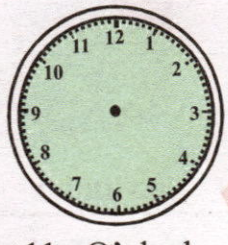
2 O'clock



7 O'clock



9 O'clock



11 O'clock

CHAPTER - 17

Ordinal Numbers 1 - 20

Arif First 1 st	Ajmal Second 2 nd	Akmal Third 3 rd	Afsar Fourth 4 th	Akhtar Fifth 5 th
Anwar Sixth 6 th	Asghar Seventh 7 th	Ashraf Eighth 8 th	Anees Ninth 9 th	Raees Tenth 10 th
Jalees Eleventh 11 th	Akbar Twelveth 12 th	Amjad Thirteenth 13 th	Saleem Fourteenth 14 th	Rashid Fifteenth 15 th
Mifzal Sixteenth 16 th	Faiz Seventeenth 17 th	Irshad Eighteenth 18 th	Mustafa Nineteenth 19 th	Firdaus Twentieth 20 th

Explain:- That the 1st, 2nd, 3rd ...shows the place and not the number of an object. 3 means - 3 things, 3rd means - one thing at third place. (third from left, right from or behind)

For Doing:-Demonstrate in the class by standing 20 students in a row side by side and one after another and ask each student to tell his place loudly.

See the above picture and tell who is at which order?

1.	Afsar	is	4th
2.	Asghar	is	_____
3.	Rashid	is	_____
4.	Karim	is	_____
5.	Nadeem	is	_____
6.	Saleem	is	_____

Tell who is:

1st. _____

5th. _____

7th. _____

9th. _____

10th. _____

There are 5 prayers (Namaz) in a day, tell which is --

First Prayer _____

Second _____

Third _____

Fourth _____

Fifth _____

Write which month are they:

August	is the	8th	month
June	is the	_____	month
May	is the	_____	month
December	is the	_____	month
April	is the	_____	month
February	is the	_____	month
January	is the	_____	month
September	is the	_____	month
November	is the	_____	month
July	is the	_____	month
March	is the	_____	month
October	is the	_____	month